

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1. (Original) A valve-operating lever comprising:
a valve arm including a first aperture defining a valve arm engagement portion;
a connector member;
a first stop cooperating with the connector member to at least partially define a first engagement portion, the valve arm engagement portion engaging the first engagement portion;
and
a second stop positioned such that the valve arm is sandwiched between the first stop and the second stop.

2. (Original) The valve-operating lever of claim 1, wherein the first aperture is substantially circular.

3. (Original) The valve-operating lever of claim 1, wherein the connector member includes a cylindrical tube.

4. (Original) The valve-operating lever of claim 1, wherein the first stop includes a first reduced-diameter portion that defines a first shoulder.

5. (Original) The valve-operating lever of claim 1, wherein the valve arm defines a valve arm thickness and wherein the first engagement portion defines an axial length that is at least as great as the valve arm thickness.

6. (Original) The valve-operating lever of claim 1, wherein the valve arm is formed from a stamped metal.

7. (Original) The valve-operating lever of claim 1, wherein at least one of the valve arm engagement portion and the first engagement portion includes knurls.

8. (Canceled)

9. (Original) The valve-operating lever of claim 1, further comprising a lever arm including a second aperture defining a lever arm engagement portion.

10. (Original) The valve-operating lever of claim 9, wherein the lever arm includes a follower surface adapted to engage a cam surface.

11. (Original) The valve-operating lever of claim 10, wherein the valve arm includes a valve actuating portion adapted to actuate a valve in response to movement of the lever arm.

12. (Original) The valve-operating lever of claim 1, wherein the first stop is integrally formed as part of the connector member.

13. (Original) The valve-operating lever of claim 12, wherein the second stop is integrally formed as part of the connector member.

14. (Original) The valve-operating lever of claim 13, wherein the first stop and the second stop overlay a portion of the valve arm.

15. (Original) The valve-operating lever of claim 13, wherein the connector member includes a third stop, the connector member and the third stop cooperating to define a second engagement portion.

16. (Original) The valve-operating lever of claim 15, wherein the third stop is integrally formed as part of the connector member.

17. (Original) The valve-operating lever of claim 15, wherein the third stop includes a second reduced-diameter portion that defines a second shoulder.

18. (Original) The valve-operating lever of claim 15, wherein a second portion of the connector member overlays a portion of the lever arm adjacent the second aperture, and the lever arm engagement portion engages the second engagement portion.

19. (Original) The valve-operating lever of claim 15, wherein at least one of the lever arm engagement portion and the second engagement portion includes a portion having knurls.

20. (Canceled)

21. (Original) The valve-operating lever of claim 15, wherein the lever arm defines a lever arm thickness, and the second engagement portion defines an axial length that is at least as great as the lever arm thickness.

22. (Original) A direct lever system for an engine, the system comprising:

a cylinder bore, the cylinder bore having an outer end;

a cam assembly having at least one cam surface and an axis inward of the outer end of the cylinder bore;

two valves having opened and closed positions;

two valve stems, each valve stem attached to one of the two valves;

a cylinder head substantially enclosing the outer end, the valves being seated in the cylinder head; and

two pivotably mounted valve-operating levers, at least one of the valve-operating levers including,

a connector member having a lever arm end and a valve arm end, the connector member defining a pivot axis about which the valve-operating lever pivots;

a lever arm including an aperture, a portion of the connector member engaging at least a portion of the lever arm adjacent the aperture to fixedly attach the lever arm to the connector member, the lever arm having a cam follower surface in contact with the at least one cam surface; and

a valve arm including an aperture, a portion of the connector member engaging at least a portion of the valve arm adjacent the aperture to fixedly attach the valve arm to the connector member.

23. (Original) The system of claim 22, wherein the lever arm aperture and the valve arm aperture are substantially circular.

24. (Original) The system of claim 22, wherein the valve arm is formed from a stamped metal.
25. (Original) The system of claim 22, wherein the connector member valve arm end includes a first stop.
26. (Original) The system of claim 25, wherein the first stop includes a first shoulder defined by a first reduced-diameter portion.
27. (Original) The system of claim 25, wherein the valve arm defines a valve arm thickness and wherein the first reduced-diameter portion defines a first axial length that is at least as great as the valve arm thickness.
28. (Original) The system of claim 22, wherein the connector member valve arm end includes a first stop integrally-formed as one piece with the connector member valve arm end.
- 29-30. (Canceled)
31. (Original) The system of claim 22, wherein at least one of the lever arm aperture and the lever arm end of the connector member includes knurls.
32. (Original) The system of claim 22, wherein at least one of the valve arm aperture and the valve arm end of the connector member includes knurls.

33. (Original) The system of claim 22, wherein the connector member lever arm end includes a lever arm end stop.

34. (Original) The system of claim 33, wherein the lever arm end stop includes a second shoulder defined by a lever arm end reduced-diameter portion.

35. (Original) The system of claim 33, wherein the lever arm defines a lever arm thickness and the second reduced-diameter portion defines a second axial length that is at least as great as the lever arm thickness.

36-63 (Canceled)